Aim

Create a DataFrame with random values and style it with a black background and yellow font.

Algorithm

1. Import necessary libraries
2. Create a DataFrame with random values
3. Define a styling function
4. Apply the styling function to the DataFrame
5. Display the styled DataFrame

Code
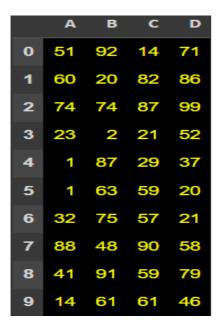
```python
import pandas as pd
import numpy as np

np.random.seed(42)
df = pd.DataFrame(np.random.randint(0, 100, size=(10, 4)), columns=['A', 'B', 'C',
'D'])

def style_df(val):
    return 'background-color: black; color: yellow'

styled_df = df.style.applymap(style_df)
styled_df
```

Output

	A	B	C	D
0	51	92	14	71
1	60	20	82	86
2	74	74	87	99
3	23	2	21	52
4	1	87	29	37
5	1	63	59	20
6	32	75	57	21
7	88	48	90	58
8	41	91	59	79
9	14	61	61	46

Result

A 10x4 DataFrame with random values is created and styled with a black background and yellow font using Pandas.